a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

wherein said channel forming region has no grain boundary, and wherein said semiconductor island includes a spin density not higher than 1×10^{17} cm⁻³,

wherein said crystalline semiconductor island includes at least one of hydrogen and halogen element at concentration not higher than 1×10^{20} cm⁻³.

80. (Twice Amended) A thin film transistor comprising:

a crystalline semiconductor island on an insulating surface;

source and drain regions in said semiconductor island;

a channel forming region between said source and drain regions;

a gate insulating film on at least said channel forming region;

a gate electrode over said channel forming region having said gate insulating film therebetween,

wherein said channel forming region has no grain boundary, and wherein said semiconductor island includes a point defect of 1 x 10^{16} cm⁻³ or more, and at least one of hydrogen and halogen element at concentration not higher than 1 x 10^{20} cm⁻³.

87. (Amended) A semiconductor device comprising:

a crystalline semiconductor island on an insulating surface;

source and drain regions in said semiconductor island;

a channel forming region between said source and drain regions;

a gate insulating film adjacent to at least said channel forming region;

a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

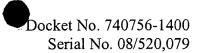
wherein said crystalline semiconductor island is formed in a monodomain region which contains no grain boundary,

wherein at least one of hydrogen and halogen element is contained at concentration not higher than 1×10^{20} cm⁻³,

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wherein the semiconductor device includes a p-channel thin film transistor having a mobility in a range of 200-400 cm²/Vs.

93. (Amended) A semiconductor device comprising:

a crystalline semiconductor island on an insulating surface;

source and drain regions in said semiconductor island;

a channel forming region between said source and drain regions;

a gate insulating film adjacent to at least said channel forming region;

a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

wherein said channel forming region is formed in a monodomain region which contains no grain boundary,

wherein said crystalline semiconductor island includes at least one of hydrogen and halogen element at concentration not higher than 1×10^{20} cm⁻³,

wherein the semiconductor device includes at least one n-channel thin film transistor having a mobility in a range of 500-1000 cm²/Vs.

99. (Twice Amended) A semiconductor device comprising:

a p-channel thin film transistor;

an n-channel thin film transistor;

each of said p-channel thin film transistor and said n-channel thin film transistor comprising:

a crystalline semiconductor island on an insulating surface;

source and drain regions in said semiconductor island;

a channel forming region between said source and drain regions;

a gate insulating film adjacent to at least said channel forming region;

a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

wherein said crystalline semiconductor island is formed in a monodomain region which contains no grain boundary,

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wherein said crystalline semiconductor island includes at least one of hydrogen and halogen element at concentration not higher than 1×10^{20} cm⁻³.

105. (Twice Amended) A semiconductor device comprising:

a p-channel thin film transistor;

an n-channel thin film transistor;

each of said p-channel thin film transistor and said n-channel thin film transistor comprising:

a crystalline semiconductor island on an insulating surface;

source and drain regions in said semiconductor island;

a channel forming region between said source and drain regions;

a gate insulating film adjacent to at least said channel forming region;

a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

wherein said crystalline semiconductor island includes carbon at a concentration not higher than 5×10^{18} cm⁻³,

wherein said channel forming region is formed in a monodomain region which contains no grain boundary,

wherein said crystalline semiconductor island includes at least one of hydrogen and halogen element at concentration not higher than 1 x 10^{20} cm⁻³.

111. (Twice Amended) A semiconductor device comprising:

an active matrix circuit portion including at least a first thin film transistor;

a driving circuit portion including at least a second thin film transistor; said second thin film transistor comprising:

a crystalline semiconductor island on an insulating surface;

source and drain regions in said semiconductor island;

a channel forming region between said source and drain regions;

a gate insulating film adjacent to at least said channel forming region;

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a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

wherein said crystalline semiconductor island is formed in a monodomain region which contains no grain boundary,

wherein said crystalline semiconductor island includes at least one of hydrogen and halogen element at concentration not higher than 1×10^{20} cm⁻³.

123. (Twice Amended) A semiconductor device comprising:

a crystalline semiconductor island on an insulating surface;

source and drain regions in said semiconductor island;

a channel forming region between said source and drain regions;

a gate insulating film adjacent to at least said channel forming region;

a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

wherein said crystalline semiconductor island includes carbon and nitrogen at a concentration not higher than 5×10^{18} cm⁻³,

wherein said crystalline semiconductor island is formed in a monodomain region which contains no grain boundary,

wherein said semiconductor device has a S value of 0.03-0.3,

wherein said crystalline semiconductor island includes at least one of hydrogen and halogen element at concentration not higher than 1×10^{20} cm⁻³,

wherein the semiconductor device includes at least one selected from the group consisting of a p-channel thin film transistor and an n-channel thin film transistor,

wherein the p-channel thin film transistor has a mobility in a range of $200-400 \text{ cm}^2/\text{Vs}$ while the n-channel thin film transistor has a mobility in a range of $500-1000 \text{ cm}^2/\text{Vs}$.

129. (Twice Amended) A semiconductor device comprising:

a crystalline semiconductor island on an insulating surface; source and drain regions in said semiconductor island;

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a channel forming region between said source and drain regions;

a gate insulating film adjacent to at least said channel forming region;

a gate electrode adjacent to said channel forming region having said gate insulating film therebetween,

wherein said crystalline semiconductor island includes carbon and nitrogen at a concentration not higher than 5×10^{18} cm⁻³,

wherein said channel forming region is formed in a monodomain region which contains no grain boundary,

wherein said semiconductor device has a S value of 0.03-0.3,

wherein said crystalline semiconductor island includes at least one of hydrogen and halogen element at concentration not higher than 1×10^{20} cm⁻³,

wherein the semiconductor device includes at least one selected from the group consisting of a p-channel thin film transistor and an n-channel thin film transistor,

wherein the p-channel thin film transistor has a mobility in a range of 200-400 cm²/Vs while the n-channel thin film transistor has a mobility in a range of 500-1000 cm²/Vs.

Please add the following new claims:

--145. The thin film transistor according to claim 73 wherein said crystalline semiconductor island includes carbon and nitrogen at a concentration not higher than 5 x 10^{18} cm⁻³, and oxygen at a concentration not higher than 5 x 10^{19} cm⁻³.

146. The thin film transistor according to claim 73 wherein the thin film transistor is one of a p-channel thin film transistor having a mobility in a range of 200-400 cm²/Vs and an n-channel thin film transistor having a mobility in a range of 500-1000 cm²/Vs.

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- 147. The thin film transistor according to claim 80 wherein said crystalline semiconductor island includes carbon and nitrogen at a concentration not higher than 5 x 10^{18} cm⁻³, and oxygen at a concentration not higher than 5 x 10^{19} cm⁻³.
- 148. The thin film transistor according to claim 80 wherein the thin film transistor is one of a p-channel thin film transistor having a mobility in a range of 200-400 $\,\mathrm{cm^2/Vs}$ and an n-channel thin film transistor having a mobility in a range of 500-1000 $\,\mathrm{cm^2/Vs}$.
- 149. The semiconductor device according to claim 87 wherein said crystalline semiconductor island includes carbon and nitrogen at a concentration not higher than 5 x 10^{18} cm⁻³, and oxygen at a concentration not higher than 5 x 10^{19} cm⁻³.
- 150. The semiconductor device according to claim 93 wherein said crystalline semiconductor island includes carbon and nitrogen at a concentration not higher than 5 x 10^{18} cm⁻³, and oxygen at a concentration not higher than 5 x 10^{19} cm⁻³.
- 151. The semiconductor device according to claim 99 wherein said crystalline semiconductor island includes carbon and nitrogen at a concentration not higher than 5 x 10^{18} cm⁻³, and oxygen at a concentration not higher than 5 x 10^{19} cm⁻³.
- 152. The semiconductor device according to claim 99 wherein the p-channel thin film transistor has a mobility in a range of 200-400 cm²/Vs and the n-channel thin film transistor has a mobility in a range of 500-1000 cm²/Vs.
- 153. The semiconductor device according to claim 105 wherein the p-channel thin film transistor has a mobility in a range of 200-400 cm²/Vs and the n-channel thin film transistor has a mobility in a range of 500-1000 cm²/Vs.

